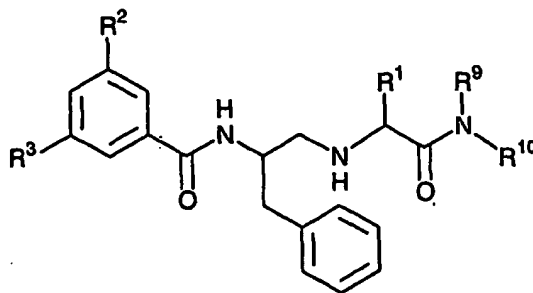


10/563,538

## WHAT IS CLAIMED IS:

1. A compound of the formula I:



I

wherein:

R<sup>1</sup> is selected from the group consisting of:

- (1) C<sub>1-6</sub>alkyl, unsubstituted or substituted with -OR<sup>5</sup> or -S(O)<sub>2</sub>-C<sub>1-6</sub>alkyl,
- (2) hydrogen,
- (3) phenyl, and
- (4) benzyl;

R<sup>2</sup> is selected from the group consisting of:

- (1) hydrogen,
- (2) R<sup>4</sup>-S(O)<sub>p</sub>-

wherein R<sup>4</sup> is independently selected from the group consisting of:

- (a) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (b) phenyl, and
- (c) benzyl,

- (3) R<sup>4</sup>-S(O)<sub>p</sub>N(R<sup>5</sup>)-

wherein R<sup>5</sup> is independently selected from the group consisting of:

- (a) hydrogen,
- (b) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (c) -C<sub>3-6</sub>cycloalkyl which is unsubstituted or substituted with methyl,
- (d) phenyl, which is unsubstituted or substituted with halo or methoxy, and
- (e) benzyl,

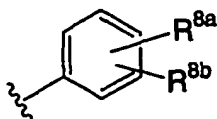
- (4) -CN,

Please see paper no. filed 20 Feb 2006  
 for inventorship changes.  
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(5)  $-C_{1-6}alkyl-CN$ ,

(6) halogen,

(7)



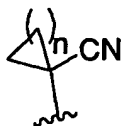
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wherein  $R^{8a}$  and  $R^{8b}$  are independently selected from the group consisting of:

- (a) hydrogen,
- (b)  $-CN$ ,
- (c) halo,
- (d)  $-C_{1-6}alkyl$ ,
- (e)  $-O-R^5$ ,
- (f)  $-S-R^5$ ,
- (g)  $-CO_2R^5$ , and
- (h) tetrazolyl,

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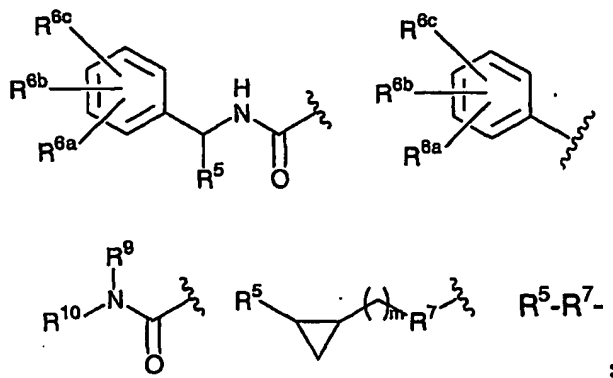
(8)



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wherein  $n$  is 1, 2, 3 or 4;

$R^3$  is selected from the group consisting of:



20  $R^{6a}$ ,  $R^{6b}$ , and  $R^{6c}$  are independently selected from the group consisting of:

- (1) hydrogen,

- (2) halogen,
- (3) -OR<sup>5</sup>,
- (4) -SR<sup>5</sup>, and
- (5) -C<sub>1-6</sub>alkyl;

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R<sup>7</sup> is selected from the group consisting of a bond, -CH=CH-, -O-, -S-, and -NH-;

R<sup>9</sup> and R<sup>10</sup> are independently selected from the group consisting of:

- (1) hydrogen,
- 10 (2) C<sub>1-6</sub>alkyl, unsubstituted or substituted with -CN or 1-4 halo,
- (3) -C<sub>3-6</sub>cycloalkyl,
- (4) phenyl, which is unsubstituted or substituted with halo or methoxy, and
- (5) benzyl,

or R<sup>9</sup> and R<sup>10</sup> may be joined together to form a pyrrolidine or piperidine ring which is  
15 unsubstituted or substituted with benzyl, -OR<sup>5</sup> or 1-4 halo;

m is independently 0, 1, or 2;

p is independently 0, 1, or 2,

and pharmaceutically acceptable salts thereof.

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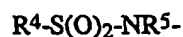
2. The compound of Claim 1 wherein R<sup>1</sup> is C<sub>1-6</sub>alkyl.

3. The compound of Claim 1 wherein R<sup>1</sup> is methyl.

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4. The compound of Claim 1 wherein R<sup>1</sup> is ethyl.

5. The compound of Claim 1 wherein R<sup>2</sup> is:



and wherein R<sup>4</sup> is selected from the group consisting of:

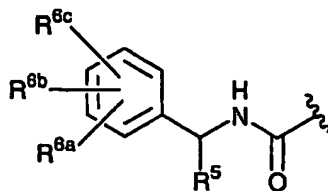
- 30 (4) C<sub>1-6</sub>alkyl,
- (5) phenyl, and
- (6) benzyl;

R<sup>5</sup> is selected from the group consisting of:

- (5) C<sub>1-6</sub>alkyl,

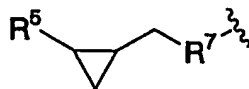
- (6) phenyl,
- (7) benzyl, and
- (8) hydrogen.

- 5                      6.      The compound of Claim 1 wherein R<sup>3</sup> is:



and wherein R<sup>5</sup> is methyl, R<sup>6a</sup> is H or F, R<sup>6b</sup> and R<sup>6c</sup> are hydrogen.

7.      The compound of Claim 1 wherein R<sup>3</sup> is:

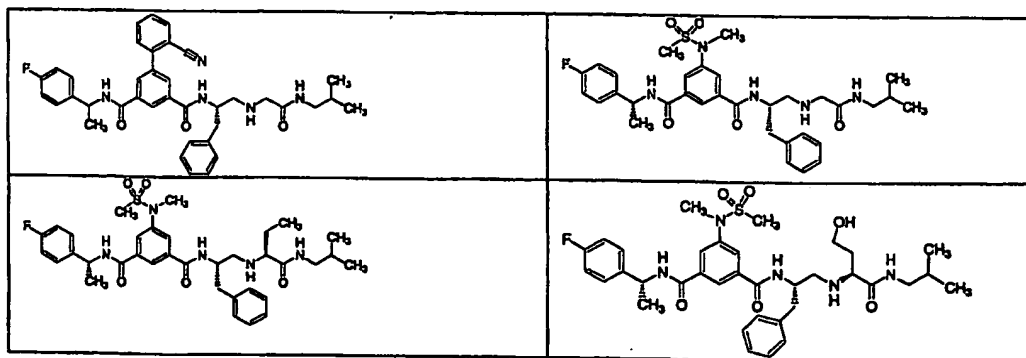


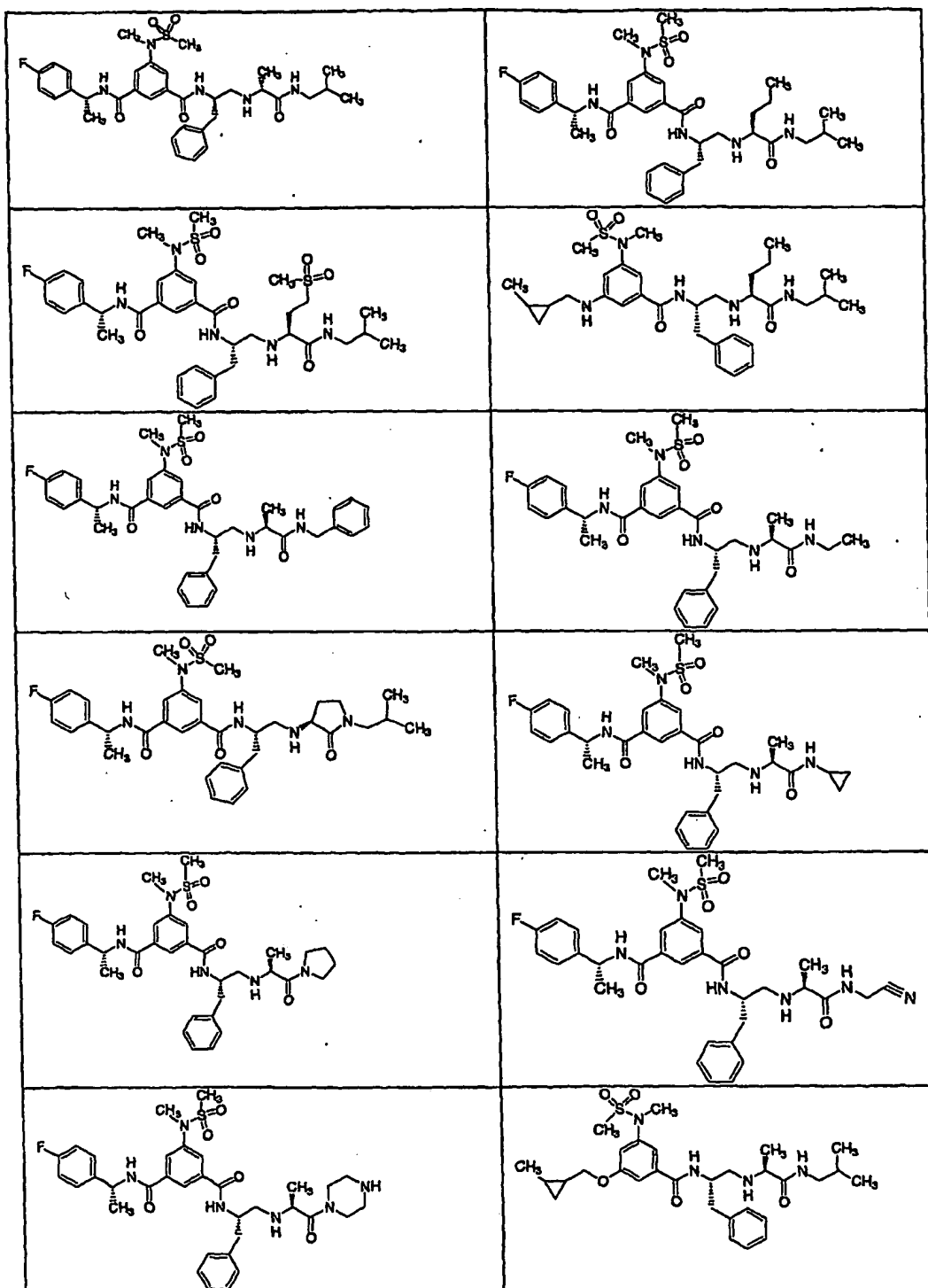
8.      The compound of Claim 1 wherein R<sup>9</sup> is hydrogen.

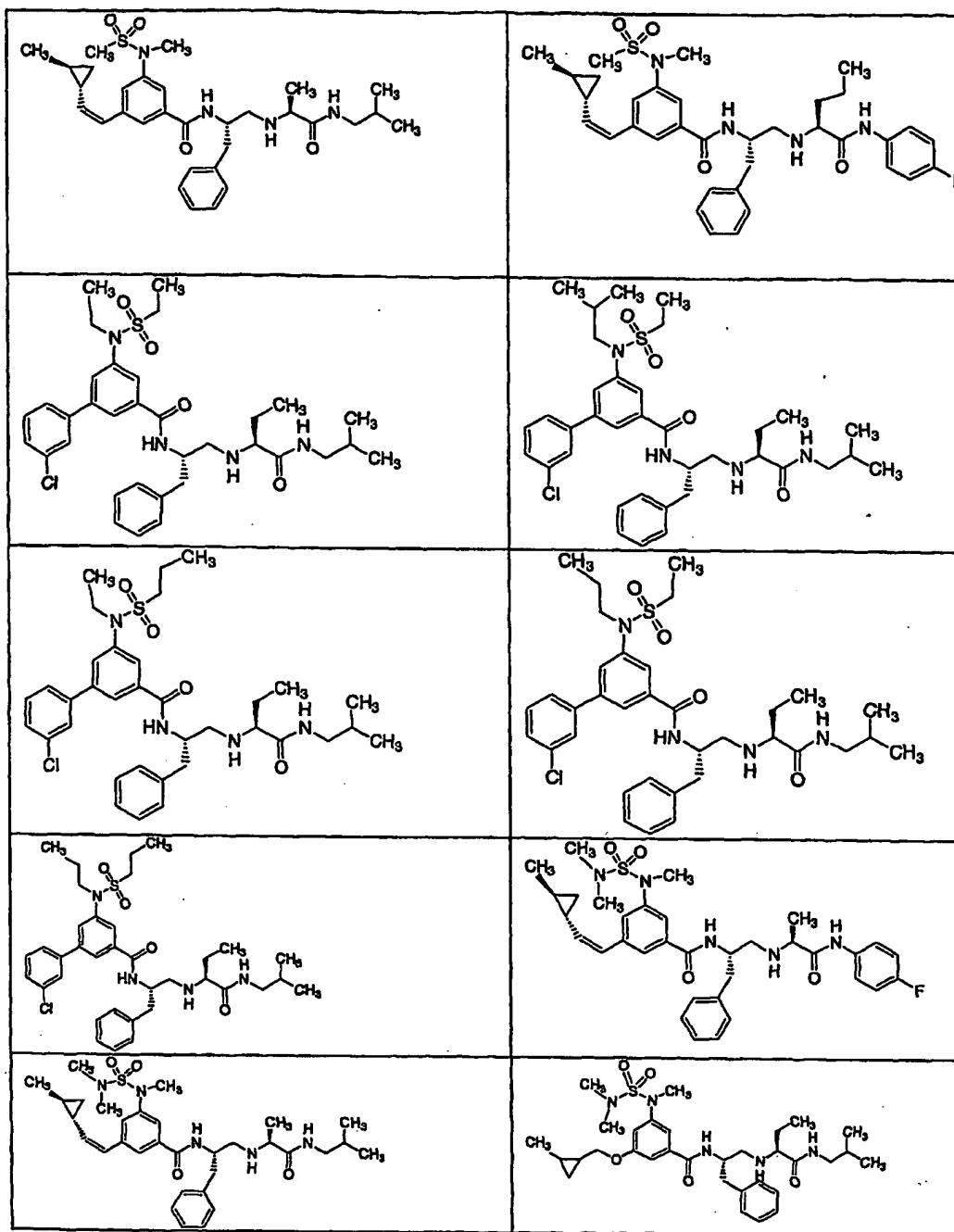
9.      The compound of Claim 1 wherein R<sup>10</sup> is C<sub>1-6</sub>alkyl.

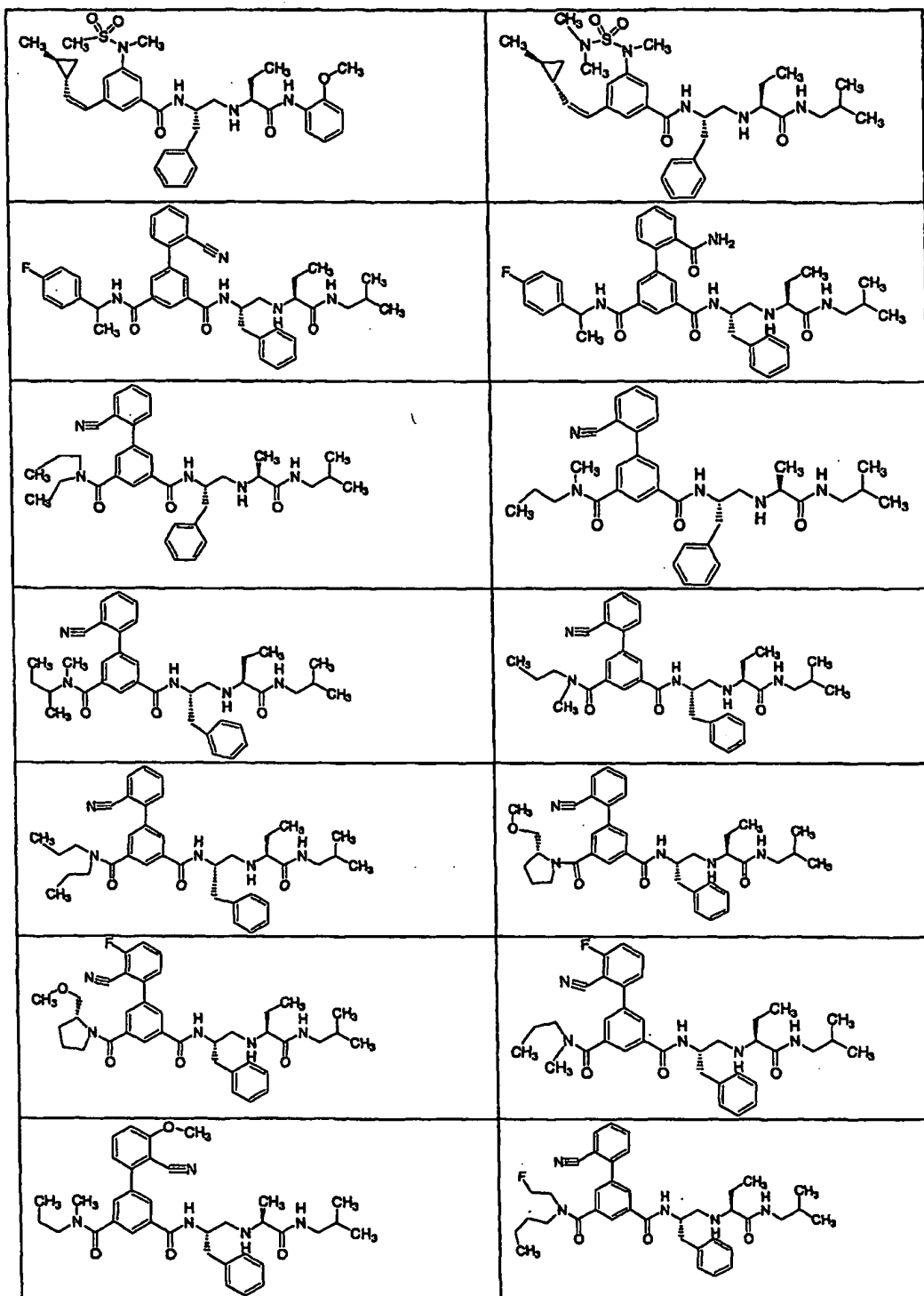
10.     The compound of Claim 1 wherein R<sup>10</sup> is iso-butyl.

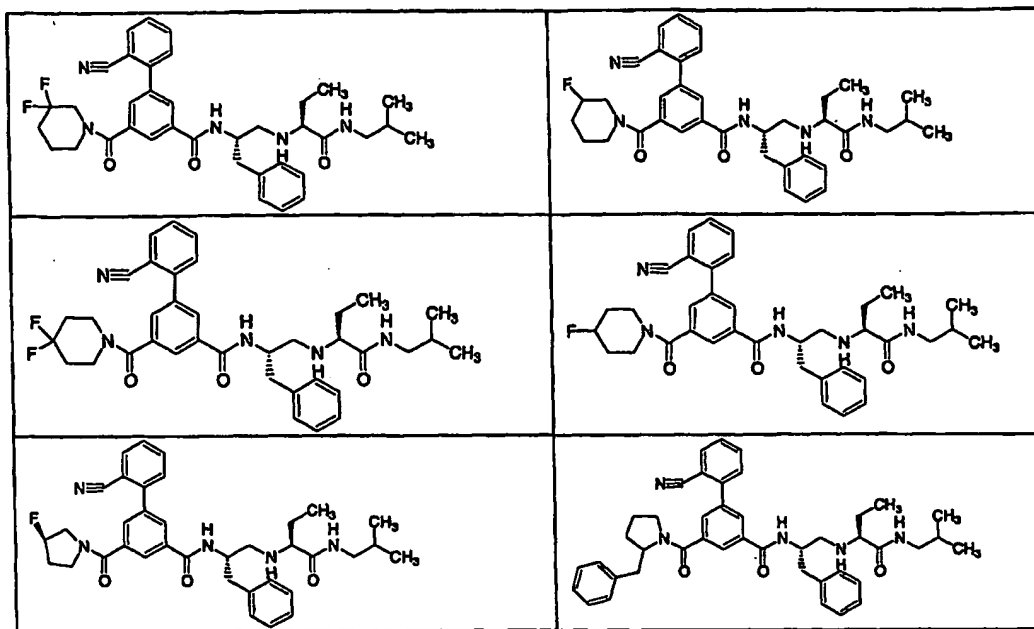
11.     A compound which is selected from the group consisting of:











and pharmaceutically acceptable salts thereof.

12. A pharmaceutical composition comprising a therapeutically effective amount of  
5 the compound of Claim 1 and a pharmaceutically acceptable carrier.

13. A method for inhibition of  $\beta$ -secretase activity in a mammal which comprises  
administering to the mammal in need thereof a therapeutically effective amount of the compound of  
Claim 1 or a pharmaceutically acceptable salt thereof.

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14. A method for treating Alzheimer's disease in a patient comprising the  
administration to the patient of a therapeutically effective amount of the compound of Claim 1 or a  
pharaceutically acceptable salt thereof.

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15. A method for preventing, controlling, ameliorating or reducing the risk of  
Alzheimer's disease in a patient comprising the administration to the patient of a therapeutically effective  
amount of the compound of Claim 1 or a pharmaceutically acceptable salt thereof.